Availability of Real-time POSIX Conformance Test Suites

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Why the TWG/IPT Should be Interested?

- **Verify RTOS Conformance to IEEE Realtime POSIX**
- **Help DII COE RT TWG/IPT come to grips for a KPC**
- **Encourage one flavor of RT POSIX OS, not multiple**
  - A clearly defined target platform for application development
  - Minimize porting costs
  - POSIX is the only basis for developing RT applications
  - Standard Conformance/Validation Process
  - Provide an effective and equitable process to assist and encourage industry in RTOS and RT application development
  - Create a broader set of reusable components for key DoD RT systems … while reducing cost
- **Increase confidence in vendor claims of POSIX Compliance.**

POSIX OS Test Suites

- **Public Domain Non Real-time (C-bindings)**
  - **IEEE**
    - **PCTS (POSIX 1003.1-1990, FIPS 151-2) (FIPS 151-2 NIST withdrawn FIPS)**
  - **The Open Group**
    - **VSX-PCTS (POSIX 1003.1-1990, FIPS 151-2)**

Note: PCTS last update 1995, VSX-PCTS last update Nov 1999

RT POSIX OS Test Suites

- **COTS - The Open Group**
  - **Available today for POSIX 1003.13 PSE 54 Platform**
    - **VSX4 (POSIX 1003.1-1996)**
    - **VSC (POSIX 1003.2-1993)**
    - **VSRT (POSIX 1003.1b-1993, RT Extensions)**
    - **VSTH (POSIX 1003.1c-1995, RT Threads)**

Note: Future tests for other IEEE POSIX .13:1998 Profiles (Units of Functionality) are planned

RT POSIX Test Suites

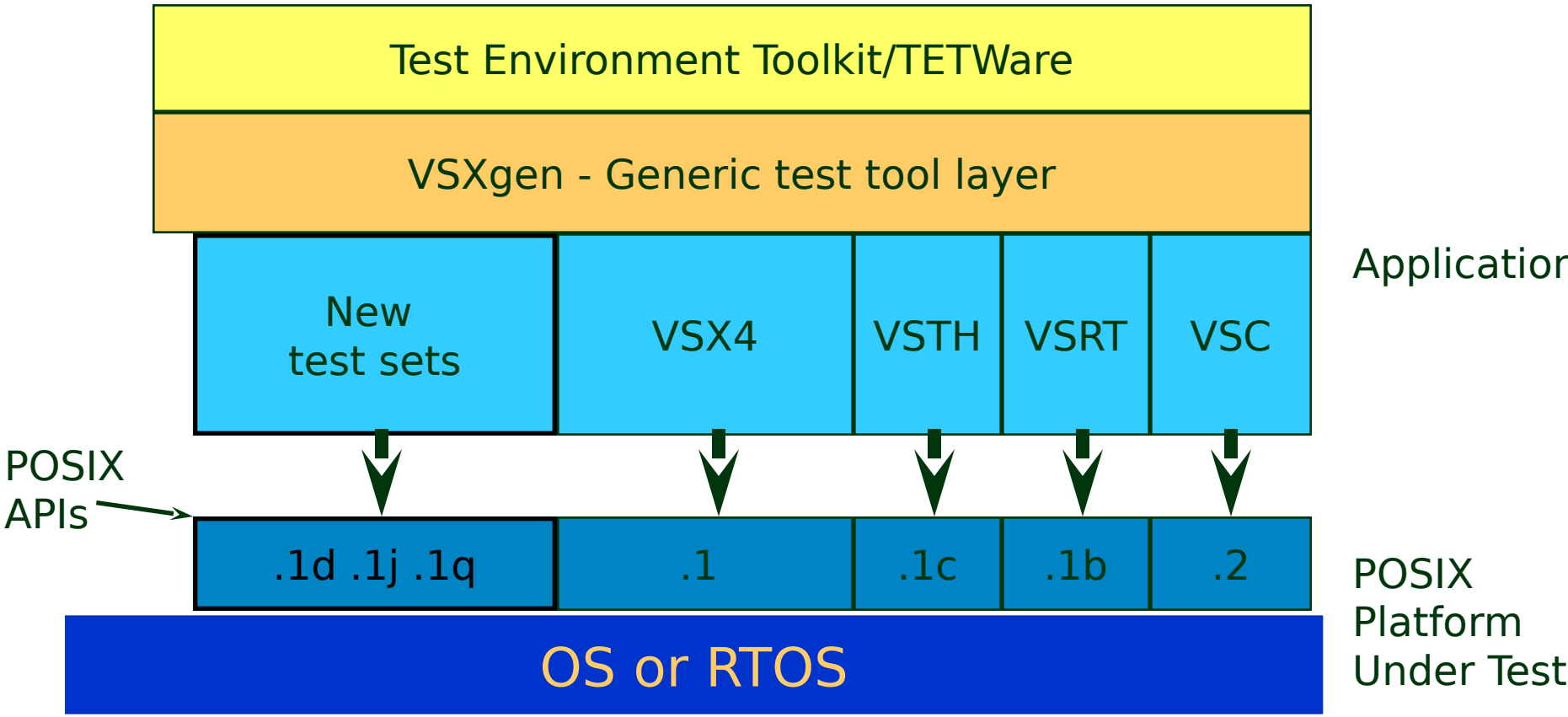
- **Available - Emerging RT**
  - VSRTE (POSIX 1003.1d-1999, Additional Real-time)
  - VSART (POSIX 1003.1j-2000, Advanced Real-time)
  - VSTRC (POSIX 1003.1q-2000, Trace)
- **For more information:**
  - **Subscribe to**

    ogrealtime-test-request@opengroup.org

Future Enhancements

- **Current test suites to be modified to support --**
  - **POSIX 1003.13 for Units of Functionality for PSE 51-55**
  - **Application Conformance Checker for APIs and Units of Functionality PSE 51-55 for C and C++**

OS Test Tool Architecture



Note: All POSIX options are tested by Open Group test tools

Availability of Test Suites

- **OSJTF contract vehicle includes 5 Site Licenses and one year support for the following:**
  - **VSX4 (POSIX 1003.1-1996 mode)**
  - **VSC (POSIX 1003.2-1993)**
  - **VSRT (POSIX 1003.1b-1993)**
  - **VSTH (POSIX 1003.1c-1995)**

License Details

- **The Open Group through the OSJTF is offering to the DII COE TWG/IPT up to five government/FFRDCs RT Beta test sites with one year support .**
- **Technical support requires a single POC for each site.**
- **After license agreement is signed by site POC, test suites will be available for download from The Open Group FTP site.**

- **http://www.opengroup.org/realtime/posixtest/**

License Conditions

- **The test results can not be publicly disclosed or used to give vendors a competitive advantage.**
- **Vendors must go through current industry practices to be certified as POSIX compliant.**
- **The TWG/IPT is not an official authority to grant that a vendor's product has "PASSED" or "NOT PASSED" The Open Group's POSIX test suite.**
- **The test results can not be used by an RTOS vendor to claim that their product has "PASSED" test suite without written consent by The Open Group.**
- **The test results can be shared within DoD agencies and DoD contractors/equipment manufactures (assuming the equipment manufactures does have a direct contract with DOD, then a Non Disclosure Agreement is needed).**

Suggested RT POSIX BETA Sites

- DISA
- USAF
- US Army
- US Navy
- USMC/OSD

Register w/ OSFJTF POC

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CORBA Test Suite Status

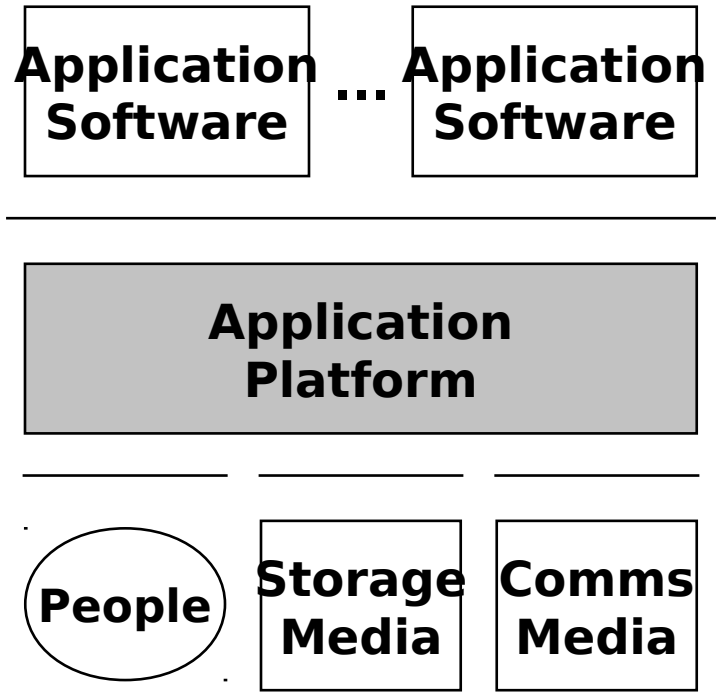
- **VSOrb/VSJOrb COTS Open Group Test Suites**
  - **Current Version 2.1**
  - **V2.3 Version – October 2000**
  - **V2.4 Version possible late 2000**
  - **V3.0 Version late 2001**
- **Interoperability (IIOP) Demonstrations based on CORBA V2.3**
  - **13-15 June 2000, Controlled Test (4 participants) at OMG meeting Oslo, Norway**
  - **11-15 September 2000, Open to all vendors at OMG meeting Burlingame, California**
- **Certification Program**
  - **Revised CORBA Brand based on V2.3 or V2.4 – late 2000**

Real-time CORBA

- **RT CORBA Version 1.0 approved by OMG July 1999**
- **Initial Test Suite Development Project Plan presented to OSJTF/DISA July 1999**
- **Project work-plan on hold pending**
  - **documentation of user conformance/interoperability requirements**
  - **OSJTF FY 2000 funding**
- **Initial RT OMG Product Profile targeted for June 2000**
- **RT Beta Test suite available 6 months after funding and work-plan approval**

BACKUP CHARTS

Compliance


Application Software
...
Application Software
Application Platform
People
Storage Media
Comms Media

CORBA Working Entities

- CORBA Standard -- OMG
- Product Profile Definition -- OMG
- Test Suite development -- Open Group
- Branding Program -- Open Group
- Resolution Process -- OMG/Open Group

Subscribe RT POSIX URL

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